



RECEIVED

OCT 2 8 2002

TECH CENTER 1600/2900

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in a box addressed to:

Assistant Commissioner for Patents,

Washington, D.C. 20231,

on march 25, 2002

Quine Intellectual Property Law Group, P.C.

Tracie Brooks

Attorney-Docket No. 02-030210US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Examiner: S. Chen

Juha Punnonen, et al.

Art Unit: 1633

Application No.: 09/247,886

INFORMATION DISCLOSURE

Filed: February 10, 1999

STATEMENT UNDER 37 CFR § 1.97 and

§ 1.98

For: TARGETING OF GENETIC

VACCINE VECTORS

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

The references cited on attached form PTO-1449 are being called to the attention of the Examiner. Copies of the references are enclosed. It is respectfully requested that the cited information be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.



Application No.: 09/247,886

Page 2

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

This IDS is being filed after the mailing date of the first Office Action and more than three months after the filing date, but prior to the Notice of Allowance or Final Office Action.

Please deduct \$180.00, pursuant to 37 CFR §1.17(p), from the undersigned's Deposit Account No. 50-0893. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

This paper is submitted in duplicate.

Respectfully submitted,

Jonathan A. Quine

Reg. No. 41,261

QUINE INTELLECTUAL PROPERTY LAW GROUP, P.C.

P.O. Box 458

Alameda, CA 94501 Tel: (510) 337-7871

Fax: (510) 337-7877





(Modified) PTO/SB/08A-B (10-96) Approved for use through 10/31/99. OMB 0651-0031

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

| C | omplete if Known | |
|------------------------|-------------------|--|
| Application Number | 09/247,886 | |
| Filing Date | February 10, 1999 | |
| First Named Inventor | Juha Punnonen | |
| Group Art Unit | 1633 | |
| Examiner Name | S. Chen | |
| Attorney Docket Number | 02-030210US | |
| Date Submitted | March 25, 2002 | |

| | | U.S. Patent Doc | | S. PATENT DOCUMENTS Name of Patentee or Applicant of | Date of Publication of | Pages, Columns, lines, |
|----------------------|-------------|-----------------|-------------------------|---|------------------------------|---|
| Examiner Initials | Cite No. | Number | Kind Code (if known) | Cited Document | Cited Document MM-DD-YYYY | Where Relevant Passages or Relevant Figures Appea |
| | 1 | 5,252,714 | | Harris et al. | 10-12-1993 | 5 . |
| | 2 | 5,348,867 | | Georgiou et al. | 09-20-1994 | |
| | 3 | 5,512,463 | | Georgiou et al. | 09-20-1994 | |
| | 4 | 5,514,588 | | Varadaraj | 05-07-1996 | |
| | 5 | 5,571,698 | | Ladner et al. | 11-05-1996 | |
| | 6 | 5,691,170 | | Gritz et al. | 11-25-1997 | |
| | 7 | 5,763,239 | | Short et al. | 06-09-1998 | |
| | 8 | 5,789,228 | | Lam et al. | 08-04-1998 | |
| | 9 | 5,814,473 | | Warren et al. | 09-29-1998 | |
| | 10 | 5,862,514 | | Kauffman et al. | 10-20-1998 | |
| | 11 | 5,866,344 | | Georgiou | 02-02-1999 | |
| | 12 | 5,876,997 | | Kretz | 03-02-1999 | |
| | 13 | 5,882,883 | | Egel-Mitani et al. | 03-16-1999 | 1.11.11.11.11.11.11.11.11.11.11.11.11.1 |
| | 14 | 5,925,749 | | Mathur, et al. | 07-20-1999 | |
| | 15 | 5,939,300 | | Robertson, et al. | 08-17-1999 | |
| | 16 | 5,942,430 | | Robertson, et al. | 08-24-1999 | |
| | 17 | 5,948,666 | | Callen, et al. | 09-07-1999 | |
| | 18 | 5,958,751 | | Murphy, et al. | 09-28-1999 | |
| | 19 | 5,962,258 | | Mathur, et al. | 10-05-1999 | |
| | 20 | 5,962,283 | | Warren et al. | 10-05-1999 | |
| | 21 | 5,985,285 | | Titball et al. | 11-16-1999 | |
| | 22 | 5,985,646 | | Murphy, et al. | 11-16-1999 | |
| | 23 | 6,043,030 | | Beach et al. | 03-28-2000 | |

| | [| |
|-----------|------------|---|
| Examiner | Date | · |
| Signature | Considered | |





(Modified) PTO/SB/08A-B (10-96) Approved for use through 10/31/99. OMB 0651-0031 Substitute to formant Complete if Known **Application Number** 09/247.886 INFORMATION DISCLOSURE Filing Date February 10, 1999 STATEMENT BY APPLICANT First Named Inventor Juha Punnonen **Group Art Unit** 1633 **Examiner Name** S. Chen (use as many sheets as necessary) **Attorney Docket Number** 02-030210US **Date Submitted** March 25, 2002 24 6,054,312 Lacocca et al. 04-25-2000 25 6,087,341 Khavari et al. 07-11-2000 6,153,410 26 Arnold et al. 11-28-2000 6,156,511 27 Schatz et al. 12-05-2000 6,159,687 28 Vind 12-12-2000 6,159,688 29 Borchert et al. 12-12-2000 6,165,718 30 Borchert et al. 12-26-2000 6,165,793 31 Stemmer 12-26-2000 6,168,919 32 Short 01-02-2001 6,171,820 33 Short 01-09-2001 6,174,673 34 Short et al. 01-16-2001 6,177,263 35 Arnold et al. 01-23-2001 6,180,406 36 Stemmer et al. 01-30-2001 6,194,183 37 Markvardsen et al. 02-27-2001 6,238,884 38 Short et al. 05-29-2001 6,251,674 39 Tobin et al. 06-26-2001 6,261,561 40 Stewart, Jr. et al. 07-17-2001 6,287,861 41 Stemmer et al. 09-11-2001 43

| | | | | | | | | | 70 |
|--------------------------|-------------|--------|---------------------|-------------------------|--|---------------------------------|--|-----|--------------|
| | | | | | N PATENT DOCUMEN | TS | | | 44 |
| | | | Foreign Patent Docu | ument | | Date of Publication | Pages, Columns, Lines, | r — | |
| Exami ner Initials | Cite No. | Office | Number | Kind Code (if known) | Name of Patentee or Applicant of Cited Document | of Cited Document MM-DD-YYYY | Where Relevant Passages or Relevant Figures Appear | Т | |
| | 42 | EP | 0 125 228 | A1 | President and Fellows of Harvard College | 06-15-1988 | | | |

| Examiner | Date | |
|-----------|------------|--|
| Signature | Considered | |



(Modified) PTO/SB/08A-B (10-96) Approved for use through 10/31/99. OMB 0651-0031

| | TRADEN | MARKLE | | · | Approved for use throi | ugh 10/31/99. OMB 0651- |
|-----------------------------------|-------------|-----------|------|---|------------------------|-------------------------|
| Substitute | for form 14 | 49A-B/PTO | | C | Complete if Known | 1 |
| | | | | Application Number | 09/247,886 | **** |
| INFORMATION DISCLOSURE | | | | Filing Date | February 10, 1 | 999 |
| STATEMENT BY APPLICANT | | | | First Named Inventor | Juha Punnone | |
| | | | | Group Art Unit | 1633 | |
| (use as many sheets as necessary) | | | | Examiner Name | S. Chen | |
| | | | | Attorney Docket Number | 02-030210US | |
| | | | | Date Submitted | March 25, 200 | 2 |
| 43 | EP | 0 725081 | A1 | Kyowa Hakko Kogyo Co., Ltd. | 08-07-1996 | |
| 44 | EP | 0876509 | B1 | Maxygen, Inc. | 09-19-2001 | |
| 45 | EP | 0911396 | A2 | Stemmer | 04-28-1999 * | |
| 46 | EP | 0911396 | А3 | Stemmer et al. | 05-06-1999 | |
| 47 | EP | 0934999 | A1 | Stemmer et al. | 08-11-1999 | |
| 48 | wo | 90/14443 | | Huse | 11-29-1990 | |
| 49 | wo | 91/07979 | | Center for Innovative Technology | 06-13-1991 | |
| 50 | wo | 92/03461 | | Ixsys, Inc. | 03-05-1992 | |
| 51 | wo | 92/06204 | | lxsys, Inc. | 04-16-1992 | |
| 52 | wo | 92/11272 | | lxsys, Inc | 07-09-1992 | |
| 53 | wo | 93/06214 | | The United States of America | 04-01-1993 | " |
| 54 | wo | 93/10214 | | Georgiou | 05-27-1993 | |
| 55 | wo | 94/06421 | | The University of Tennessee Research | 03-31-1994 | |
| 56 | wo | 94/23738 | A1 | Medisorb Technologies International L.P. | 10-27-1994 | |
| 57 | wo | 94/26787 | A1 | The Boead of Trustees of the Leland Stanford Junior University | 11-24-1994 | |
| 58 | wo | 95/16027 | A1 | Borrebaeck | 06-15-1995 | |
| 59 | wo | 96/11279 | . A1 | US Department of Health and Human | 04-18-1996 | |

| Examiner | Date | |
|-----------|------------|--|
| Signature | Considered | |

Services



(Modified) PTO/SB/08A-B (10-96) Approved for use through 10/31/99. OMB 0651-0031

| Substitute for form 1449A-B/PTO | C | omplete if Known |
|-----------------------------------|------------------------|-------------------|
| | Application Number | 09/247,886 |
| NFORMATION DISCLOSURE | Filing Date | February 10, 1999 |
| STATEMENT BY APPLICANT | First Named Inventor | Juha Punnonen |
| | Group Art Unit | 1633 |
| | Examiner Name | S. Chen |
| (use as many sheets as necessary) | Attorney Docket Number | 02-030210US |
| | Date Submitted | March 25, 2002 |

| 60 | wo | 96/13250 | A1 | Amgem, Inc. | 05-09-1996 | | |
|----|-----|----------|----|--|------------|------------|--|
| 61 | wo. | 96/37624 | | MG-PMC, L.L.C. | 11-28-1996 | Medical to | |
| 62 | wo | 97/04077 | | Recombinant Biocatalysis, Inc. | 02-06-1997 | \$i | |
| 63 | wo | 97/07128 | A1 | Duke University | 02-27-1997 | | |
| 64 | wo | 97/07205 | | Okkels | 02-27-1997 | | |
| 65 | wo | 97/11605 | A1 | University of Pittsburg of the Commonwealth System of Higher Education | 04-03-1997 | | |
| 66 | wo | 97/25410 | | Borchert et al | 07-17-1997 | | |
| 67 | WO | 97/32987 | A1 | University of Toronto | 09-12-1997 | | |
| 68 | wo | 97/44361 | | Lam et al. | 11-27-1997 | | |
| 69 | wo | 97/48416 | | Mathur et al. | 12-24-1997 | | |
| 70 | wo | 97/48717 | | Short et al. | 12-24-1997 | | |
| 71 | wo | 97/48794 | | Murphy et al. | 12-24-1997 | | |
| 72 | wo | 98/00526 | | Robertson et al. | 01-08-1998 | | |
| 73 | wo | 98/01581 | | Short | 01-15-1998 | | |
| 74 | wo | 98/05764 | | Novo Nordisk | ∩2-12-1998 | | |
| 75 | wo | 98/05765 | | Novo Nordisk | 02-12-1998 | | |
| 76 | wo | 98/24799 | | Bylina | 06-11-1998 | | |
| 77 | wo | 98/28416 | | Bjornvad et al. | 07-02-1998 | | |
| 78 | wo | 98/36080 | | Affholter et al. | 08-20-1998 | | |
| 79 | wo | 98/41622 | | Borchert et al. | 09-24-1998 | | |
| 80 | wo | 98/41623 | | Borchert et al. | 09-24-1998 | | |
| 81 | wo | 98/41653 | | Vind et al. | 09-24-1998 | | |

| Examiner | Date | |
|-----------|------------|-----|
| Signature | Considered | W 1 |

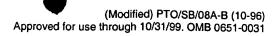


INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

| С | omplete if Known | |
|------------------------|-------------------|--|
| Application Number | 09/247,886 | |
| Filing Date | February 10, 1999 | |
| First Named Inventor | Juha Punnonen | |
| Group Art Unit | 1633 | |
| Examiner Name | S. Chen | |
| Attorney Docket Number | 02-030210US | |
| Date Submitted | March 25, 2002 | |

| | 82 | wo | 98/42727 | SRI International |] | 10-01-1998 | | | |
|-------------------|-----|----|----------|---|-------------|---------------|---|--------|---|
| | 83 | wo | 98/42832 | Arnold et al. | | 10-01-1998 | | | |
| | 84 | wo | 98/45444 | The Regents of t University of California | he | 10-15-1998 | - | f. | |
| | 85 | wo | 98/48034 | Neiboer et al. | | 10-29-1998 | | | |
| | 86 | WO | 98/49286 | Board of Regents The University of Texas System | | 11-05-1998 | | | |
| | 87 | wo | 98/58085 | Short et al. | | 12-23-1998 | | | |
| | 88 | wo | 99/07837 | Callen | | 02-18-1999 | | | |
| | 89 | wo | 99/08539 | Kretz | | 02-25-1999 | | × | |
| | 90 | wo | 99/10472 | Short | | 03-04-1999 | | - | : |
| | 91 | wo | 99/10539 | Short | | 03-04-1999 | | | |
| | 92 | wo | 99/19506 | lxsys, Inc. | | 04-22-1999 | | | |
| | 93 | wo | 99/19518 | Short | | 04-22-1999 | | | |
| | 94 | wo | 99/21979 | Apt et al. | | 05-06-1999 | | | |
| | 95 | wo | 99/23107 | Stemmer et al. | | 05-14-1999 | | | |
| | 96 | wo | 99/23236 | Diversa Corp. et | al. | 05-14-1999 | | | |
| | 97 | wo | 99/29902 | Arnold et al. | | 06-17-1999 | | | |
| | 98 | WO | 99/41366 | The Board of Trustees of the Leland Stanford Junior University | | 08-19-1999 | | | |
| | 99 | wo | 99/41368 | Maxygen, Inc. | | 08-19-1999 | | | |
| | 100 | wo | 99/41369 | Maxygen, Inc. | | 08-19-1999 | | | |
| | 101 | wo | 99/41383 | Maxygen, Inc. | | 08-19-1999 | | | |
| | 102 | wo | 99/41402 | Maxygen, Inc. | | 08-19-1999 | | | |
| Examin Signatu | | | | | Date Con | e nsidered | | | |





Substitute for fam 1449A-B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

| C | omplete if Known | | |
|------------------------------------|------------------|--|--|
| Application Number 09/247,886 | | | |
| Filing Date February 10, 1999 | | | |
| First Named Inventor Juha Punnonen | | | |
| Group Art Unit 1633 | | | |
| Examiner Name | S. Chen | | |
| Attorney Docket Number 02-030210US | | | |
| Date Submitted | March 25, 2002 | | |

| 103 | wo | 99/45154 | Short et al. | 09-10-1999 | |
|-----|----------|----------|----------------------|------------|---|
| 104 | wo | 99/57128 | Stemmer et al. | 11-11-1999 | |
| 105 | wo | 99/65927 | Maxygen, Inc, | 12-23-1999 | 5 |
| 106 | wo | 00/16984 | Polard Corporation | 03-30-2000 | |
| 107 | wo | 00/18778 | Phylos, Inc. | 04-06-2000 | |
| 108 | wo | 00/42560 | Selifonov et al. | 07-20-2000 | |
| 109 | wo | 00/42561 | Crameri et al. | 07-20-2000 | |
| 110 | wo | 00/46344 | Diversa Corrporation | 08-10-2000 | |
| 111 | wo | 00/53744 | Short et al. | 09-14-2000 | |
| 112 | wo | 00/58517 | Short et al. | 10-05-2000 | |
| 113 | wo | 01/00234 | Maxygen, Inc | 01-04-2001 | |
| | ļ | | | | |
| | <u> </u> | | | | |

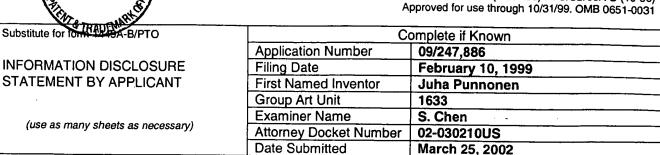
| | | OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS | |
|--------------------------|-------------|---|---|
| Exami ner Initials | Cite No. | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | Т |
| | 114 | Affholter et al. (1998) "Directed evolution of proteins and pathways by DNA shuffling." Book of Adstracts, 216th ACS National Meeting, Boston, August 23-27, BIOT-042 | |
| | 115 | Agren et al. (1997) "Genetically Engineered Nontoxic Vaccine Adjuvant That Combines B Cell Targeting with Immunomodulation by Cholera Toxin A1 Subunit." J. Immunol 158:3936 | |
| | 116 | Ahmed (1995) J Bacteriology 177(14):3904-3910 | |
| | 117 | Ahn et al. (1996) "Human cytomegalovirus inhibits antigen presentation by a sequential multistep process." <i>Proc. Natl. Acad, Sci USA</i> 93:10990 | |
| | 118 | Aizaki et al. (1998) "Full-Length Complementary DNA of Hepatitus C Virus Genome From an Infectious Blood Sample." Hepatology 27:621-627 (1998) | |
| | 119 | Aldovini & Young (1991) "Humoral and cell-mediated immune response to live recombinant BCG-HIV vaccines." <i>Nature</i> 351:479-482 | |
| | 120 | Ambriovic, A. et al. (1997) "Efficacy of Replication-Defective Adenovirus-Vectored Vaccines: Protection Following Intramuscular Injection Is Linked to Promoter Efficiency in Muscle Representative Cells" Virology 238:, 327-335 | |

| Examiner | Date | |
|-----------|------------|--|
| Signature | Considered | |



Substitute for form 4449A-B/PTO Complete if Known **Application Number** 09/247,886 INFORMATION DISCLOSURE Filing Date February 10, 1999 STATEMENT BY APPLICANT First Named Inventor Juha Punnonen Group Art Unit 1633 **Examiner Name** S. Chen (use as many sheets as necessary) Attorney Docket Number 02-030210US **Date Submitted** March 25, 2002

| | Amel and Hawin (4000) Black Life Life Control of the Control of th | | |
|-----------|--|--|--|
| 121 | vaccines." <i>JAVMA</i> 193:332-333 | | |
| 122 | Atkins et al. (1996) "Manipulation of the Semliki Forest Virus Genome and Its Potential for Vaccine Construction." <i>Mol Biotechnol</i> 5:33-38 | | |
| 123 | Axon (1998) "Treatment of Helicobacter pylori: future therapeutic and prophylactic perspectives." Gut 43(1):S70-3 | | |
| 124 | Baba et al., "Identification of CCR6, the Specific Receptor for a Novel Lymphocyte-directed CC Chemokine LARC," The J. of Biolog. Chem. 272 (23): 14893-14898 (1997). | | |
| 125 | Dec. 1 1 (4000) 111 | | |
| 126 | Beck et al., "DNA Sequence Analysis of 66 kb of the Human MHC Class II Region Encoding a Cluster of Genes for Antigen Processing," J. Mol. Biol. 228:433-441 (1992) | | |
| 127 | | | |
| 128 | Benham et al. (1997) "Proteasome activity limits the assembly f HMC class 1 molecules after IFN-gamma stimulation." <i>J. Immol</i> 159(2):5896-5904 | | |
| 129 | Berkhout et al. (1999) "Genetic Instability of Live, Attenuated Human Immunodeficiency Virus Type I Vaccine Strains." <i>J. Virology</i> 73(2):1138-1145 | | |
| 130 | Bernard et al. (1994) "Transcriptional Control and Cell Type Specificity of HPV Gene Expression." Arch Dermatol 130:210 | | |
| 131 | Bhatnagar et al. (1982) "Immune response to synthetic peptide analogues of hepatitis B surface antigen specific for the a determinant." Proc Nat'l Acad Sci USA 79:4400-4404 | | |
| 132 | Bielefeldt-Ohmann, H. et al., "Analysis of a recombinant dengue-2 virus-dengue-3 virus hybrid envelope protein expressed in a secretory baculovirus system," J. Gen. Virol. 78:2723-2733 (1997) | | |
| 133 | Blachere et al., "Heat Shock Protein-Peptide Complexes, Reconstituted In Vitro, Elicit Peptide-specific Cytotoxic T Lymphyocyte Response and Tumor Immunity," J. Exp. Med. 186:1315-22 (1997) | | |
| 134 | Blanchard et al. (1998) "Modified vaccinia virus Ankara undergoes limited replication in human cells and lacks several immunomodulatory proteins " J. Gen. Virol 79:1159-1167 | | |
| 135 | Blaser (1998) "Helicobacter pylori and gastric disease." BMJ 316:1507-1510 | | |
| 136 | Bloom et al. (1993) Characterization of Chimeric Full-Length Molecular Clones of Aleutian Mink Disease Parvovirus (ADV) " J. Virol 67(10):5976-5988 | | |
| 137 | Bolhuis (1995) J. Biological Chamistry 270(3):26092-26098 | | |
| 138 | Botstein and Shortle, "Strategies and Applications of in Vitro Mutagenesis," Science 229:1193-1201 (1985) | | |
| 139 | Boursnell et al. (1997) "A Genetically Inactivated Herpes Simplex Virus Type 2 (Hsv-2) Vaccine Provides Effective Protection against Primary & Recurrent HSV-2 Disease." J. Infect. Dis 175:16-25 | | |
| 140 | Bray et al. (1989) "Mice Immunized with Recombinant Vaccinia Virus Expressing Dengus Virus Encepha;it is." J. Virol 63:2853-2856 | | |
| 141 | Bridgen and Elliot (1996) "Rescue of a segmented negative-strand RNA virus entirely from cloned complementary DNA's." Proc. Nat'l Acad. Sci USA 93:15400-15404 | | |
| 142 | D 1 1 (1000) #F : | | |
| F | | | |
| Examiner | Date | | |
| Signature | Considered | | |



| ···· | |
|------|--|
| | basic protein." Nature 379:343-346 |
| 143 | Brubaker (1991) "The V Antigen of Yersiniae: An Overview." Current Investigations of the Microbiology of Yersinae 12:127-133 |
| 144 | Burger et al. (1995) Proc. of thr Amer Assoc. for Cancer Research 36:522 Abst #3108 |
| 145 | Burke et al. (1999) "Formulation, Stability and Delivery of Live Attenuated Vaccines for Human Use." Crit. Rev. Ther Drig. Carrier Syst 16:1-83 |
| 146 | Burton (1995) "Phage Display." Immunotechnology 1(2):87-94 |
| 147 | Carroll and Moss (1997) "Host range and Cytopathogenicity of the Highly Attenuated MVA Strain of Vaccinia Virus" Virology 238:198-211 |
| 148 | Carter et al., "Improved oligonucleotide site-directed mutagenesis using M13 vectors," Nucl. Acids Res. 13:4431-4443 (1985) |
| 149 | Carter, "Improved Oligonucleotide-Directed Mutagenesis Using M13 Vectors," Methods in Enzymol. 154:382-403 (1987) |
| 150 | Carter, "Site-directed mutagenesis," Biochem. J. 237:1-7 (1986) |
| 151 | Casal (1999) "Use of parvovirus-like particles for vacation and induction of multiple immune response." Biotechnol Appl. Biochem 29:-141-150 |
| 152 | Cathomen et al. (1998) "A matrix-less measles virus is infectious and extensive cell fusion: consequences for propagation in the brain." <i>EMBO J.</i> 17(14):3899-3908 |
| 153 | Chang, C., et al. (1999) "Evolution of a cytokine using DNA family shuffling." Nature Biotechnology 17:793-797. |
| 154 | Chen et al. "Regulatory T Cell Clones Induced by Oral Tolerance: Suppression of Autoimmune Encephalomyelitis." Science 265:1237-1240 |
| 155 | Chen et al., "Discontinuous epitopes of hepatitis B surface antigen derived from a filamentous phase peptide library," Proc. Nat'l. Acad. Sci. USA 93:1997-2001 (1996) |
| 156 | Chin et al. (1993) "Functions and Regulation of the Human Miltidrug Resistance Gene." Adv. Cancer Res. 60:157-180 |
| 157 | Chu et al. (1995) "A Vaccina Virus-Vectored Hantaan Virus Vaccing Protects Hamsters from Challenge with Hantaan and Seoul Viruses but Not Pumala Virus." J. Virol 69:6417 |
| 158 | Clackson et al. (1994) "In vitro selection from protein and peptide libraries." <i>Trends Biotechnol</i> 12(5): 173-184 |
| 159 | Coco et al., (2001) "DNA shuffling method for generating highly recombined genes and evolved enzymes" Nature Biotechnology vol. 19 pp. 354-359 |
| 160 | Collman et al. (1992) "An Infectious Molecular Clone of an Unusual Macrophage-Tropic and Highly Cytopathic Strain of Human Immunodeficiency Virus Type 1." J. Virol 66(12):7517-7521 |
| 161 | Conry et al. (1996) "Selected strategies to augment polynucleotide immunization." Gene Therapy 3(1):67-74 |
| 162 | Cote et al. (1986) "Protection of Chimpanzees from Type B Hepatitis by Immunization with Woodchuck Hepatitis Virus Surface Antigen." <i>J. Virol</i> 60:895-901 |
| 163 | Crabtree (1998) "Eradication of chronic Helicobacter pylori infection by therapeutic vaccination." Gut 43:7-8 |

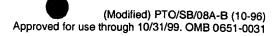
| Examiner | Date | |
|-----------|------------|--|
| Signature | Considered | |

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



| Substitute for form 1449A-B/PTO | form 1449A-B/PTO Complete if Known | |
|-----------------------------------|------------------------------------|-------------------|
| | Application Number | 09/247,886 |
| INFORMATION DISCLOSURE | Filing Date | February 10, 1999 |
| STATEMENT BY APPLICANT | First Named Inventor | Juha Punnonen |
| | Group Art Unit | 1633 |
| (use as many sheets as necessary) | Examiner Name | S. Chen |
| | Attorney Docket Number | 02-030210US |
| | Date Submitted | March 25, 2002 |

| 16 | Craiu et al., "Two distinct proteolytic processes in the generation of a major histocompatibility complex class I-presented peptide," Proc. Nat'l. Acad. Sci. USA 94:10850-10855 (1997) | | |
|-------------|--|--|--|
| 16 | Crameri & Stemmer (1993) "10(20)-fold aptamer library amplification without gel purification." Nucleic | | |
| | Acids Research 21(18): 4410 | | |
| 160 | (1997) | | |
| 167 | Acad Sci USA 87:6378-6382 | | |
| 168 | 5:368-387 | | |
| 169 | Davis et al. (1989) "In vitro Synthesis of Infectious Venezuelar Equine Encephalitis Virus RNA from a cDNA Clone: Analysis of a Viable Deletion Mutant." Virology 171:189-204 | | |
| 170 | D11 (4007) #DNA D : 1: | | |
| 171 | D-11 -4 -1 (4000) ID 1 D 11 1 II 1 | | |
| 172 | Discovered to the control of the con | | |
| 173 | D185 A 8 (4007) #A | | |
| | functional differences between mambrean-bound and soluble CNTF Alpha-receptors." <i>J Biol. Chem.</i> 272(37):23069-23075 | | |
| 174 | Donovan et al. (1987) "Genes Encoding Spore Coat Polypeptides from Bacillus subtilis." J. Mol Biol 196:1-10 | | |
| 175 | Drabkin et al. (1996) "Amber Suppression in Mammalian Cells Dependent upon Expression of an Escherichia coli Aminoacyl-tRNA Synthetase Gene." <i>Mol Cell. Biol.</i> 16(3):907-913 | | |
| 176 | Dubols et al. (1998) "Immunization against Natural Helicobacter pylori Infection in Nonhuman Primates." Infect. Immun. 66:4340-4346 | | |
| 177 | Dunn (1996) "Phage display of proteins." Curr Opin Biotechnology 7(5):547-553 | | |
| 178 | Eghtedarzadeh and Henikoff, "Use of oligonucleotides to generate large deletions," Nucl. Acids Res. 14:5115 (1986) | | |
| 179 | Engels and Ackermann (1996) "Pathogenesis of ruminant herpesvirus infections." Vet Microbiol 53:3- | | |
| 180 | Felici, Franco et al., "Peptide and protein display on the surface of filamentous bacteriophage," Biotechnol. Annu. Rev. 1:149-83 (1995) | | |
| 181 | Fields et al., "Crystal structure of a T-cell receptor B-chain complexed with a superantigen," Nature 384:188-192 (1996) | | |
| 182 | Francisco, Joseph A. et al., "Production and fluorescence-activated cell sorting of Escherichia coli | | |
| | expressing a functional antibody fragment on the external surface," Proc. Nat'l. Acad. Sci. USA 90:10444-10448 (1993) | | |
| 183 | Frankel and Young (1998) "HIV-1 Fifteen Proteins and an RNA." Annu. Rev. Biochem 67:1-25 | | |
| 184 | Freeman et al., "B7-1 and B7-2 Do Not Deliver Identical Costimulatory Signals, Since B7-2 but Not B7-1 | | |
| | | | |
| Examiner | Date | | |
| Signature | Considered | | |
| | <u> </u> | | |



Substitute for form 1949A-B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

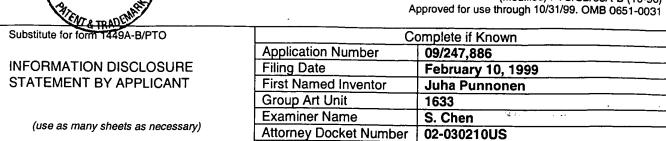
(use as many sheets as necessary)

| C | omplete if Known | |
|------------------------|-------------------|--|
| Application Number | 09/247,886 | |
| Filing Date | February 10, 1999 | |
| First Named Inventor | Juha Punnonen | |
| Group Art Unit | 1633 | |
| Examiner Name | S. Chen | |
| Attorney Docket Number | 02-030210US | |
| Date Submitted | March 25, 2002 | |

| | Preferentially Costimulates the Initial Production of IL-4," Immunity 2:523 (1995) | Τ |
|----------------|--|----------|
| 185 | Fritz et al. "Oligonucleotide-directed construction of mutations: a gapped duplex DNA procedure | 十 |
| 100 | without enzymatic reactions in vitro," Nucl. Acids Res. 16:6987-6999 (1988) | |
| 186 | Gaczynska et al.,"Proteasome Subunits X and Y alter Peptidase Activities in Opposite Ways to the | |
| | Interferon-y-induced Subunits LMP2 and LMP7*, J. Biol. Chem. 271:17275-17280 (1996) | |
| 187 | Galler et al. (1997) "The Yellow fever 17D vaccine virus: molecular basis of viral attnuation and its use | 1 |
| | as an expression vector." J. Med Biol. Res. 30:157-168 | |
| 188 | Galocha et al. (1997) "The Active Site of ICP47, a Herpes Simple Virus-encoded Inhibitor of the Major | |
| and the second | Histocompatibility Complex " J. Exp. Med 185:1565-1572 | |
| 189 | Garnett and Grenfell (1992) "The epidemiology of varicella-zoster virus infections: the influence of | |
| | varicella on the prevalence of herpes zoster." Epidemiol. Infect 108:513-528 | |
| 190 | Geigenmuller et al. (1997) "Construction of a Genome-Length cDNA Clone for Human Astrovirus | Г |
| | Serotype 1 and Synthesis of Infectious RNA Transcrips." J. Virol 71:1713-1717 | |
| 191 | Goldman et al. (1999) Molecular Cloning and Expression of Major Structural Protein " J. Virol. | |
| | 73:4465-4469 | |
| 192 | Gritsun et al. (1998) "Development and analysis of a tick-bone encephalitis virus infectious clone using | l |
| | a novel and rapid strategy." J Virol. Methods 76:109-120 | ┖ |
| 193 | Groettrup et al. "The subunits MECL-1 and LMP2 are mutually required for incorporation into the 20S | - |
| | proteasome," Proc. Nat'l. Acad. Sci. USA 94:8970-8975 (1997) | L |
| 194 | Groettrup et al., "A third interferon –γ-induced subunit exchange in the 20S proteasome," Eur. J. | |
| | Immunol. 26:863-869 (1997) | |
| 195 | Groux et al.,"A CD4+ T-cell subset inhibits antigen-specific T-cell responses and prevents colitis," | ļ |
| | Nature 389:737 (1997) | L |
| 196 | Grundstrom et al., "Oligonucleotide-directed mutagenesis by microscale 'shot-gun' gene synthesis," | ł |
| | "Nucleic Acids Res. 13:3305-3316 (1985) | <u> </u> |
| 197 | Gualano et al. (1998) "Identification of a major determinant of mouse neurovirulence of dengue virus | |
| | typw 2 using stably cloned genomic-length cDNA." J. Gen. Virol. 79:437-466 | ┕ |
| 198 | Guo et al. (1998) "Susceptibility to recombination rearrangements of a chimeric plum pox potyvirus | |
| | genome after insertion of a foreign gene." Virus Res 57:183-195 | L |
| 199 | Halminen et al. (1997) "Expression of MXA Protein in Blood Lymphocytes Discriminates between Viral and Bacterial Infections in Febrile Children." <i>Pediatric Research</i> 41:647-650 | |
| | Han, Xiaoliang et al., "Ligand-directed retroviral targeting of human breast cancer cells," Proc. Natl. | ┞ |
| 200 | Acad. Sci USA 92:9747-9751 (1995) | |
| | Hanes, Jozef and Andreas Pluckthun., "In vitro selection and evolution of functional proteins by using | \vdash |
| 201 | ribosome display," Proc. Nat'l. Acad. Sci. USA 94(10):4937-42 (1997) | |
| | Haq et al. (1995) "Oral Immunization with a Recombinant Bacterial Antigen Produced in Transgenic | ┝ |
| 202 | Plants.* Science 268:714-716 | l |
| 000 | Haralambiev (1967) "Immunogenicity Studies on a Inactivated IBR Vaccine Administered Into the Nasal | ┢ |
| 203 | Mucosa." Acta Vet Acad Sci Hung 26:215-217 | |
| 1004 | Harrington et al. (1992) "An outbreak of Respiratory Syncytial Virus in a Bone Marrow Transplant | ╁ |
| 204 | Center." J. Infect Dis. 165:987-993 | |
| | HCJ Ertl et al., (1996) "Genetic Immunization" Viral Immunization Vol. 9, No. 1, pp. 1-9. | ╁ |
| 205 | | |

| | | } |
|-----------|------------|---|
| Examiner | Date | |
| Signature | Considered | |

March 25, 2002



Date Submitted

| | 206 | He et al., "Antibody-ribosome-mRNA (ARM) complexes as efficient selection particles for in vitro display and evolution of antibody combining sites," Nucl. Acids Res. 25(24):5132-4 (1997) | | |
|---------|-----|--|--|--|
| | 207 | He et al. (1998) "The Paramyxovirus SV5 Small Hydrobhobic (SH) Protein Is Not Essential for Virus Growth in Tissue Culture Cells." Virology 250:30-40 | | |
| | 208 | Hensel and Lubitz (1997) Vaccination by Aerosols: Modulation of Clearance Mechanism in the Lung. * 5 Behring. Inst. Mitt. 98:212-219 | | |
| | 209 | Hill et al., "Phage presentation," Mol Microbiol 20(4):685-92 (1996) | | |
| | 210 | Hoffman and Banerjee (1997) "An Infectious Clone of Human Parainfluenza Virus Type 3." J Virol. 71:4272-4277 | | |
| | 211 | Hohol et al. (1996) "Three-year Open Protocol Continuation Study of Oral Tolerization with Myelin Antigens in Multiple Sclerosis and Design of a phase III Pivotal Trial." Ann. N.Y. Acad Sci. 778:243-250 | | |
| | 212 | Holzmann, H. et al., "Molecular epidemiology of tick-borne encephalitis virus: cross-protection between European and Far Eastern subtypes," Vaccine 10:345 (1992) | | |
| | 213 | Hopkins and Yoder (1986) "Reversion to Virulence of Chicken-Passaged Infectious Bronchitis Vaccine Virus." Avain Dis. 30:221-223 | | |
| | 214 | Hourvitz et al. (1996) "Reactogenicity and immunogenicity of a new recombinant hepatitis B Vaccine containing Pre S Antigens." <i>J Virol. Hepatitis</i> 3:37-42 | | |
| | 215 | Hristov and Karadjov (1975) Vet Med Nauki 13:5 | | |
| | 216 | Huang, Sharon K.S. et al., "Antibody Responses to Melanoma/Melanocyte Autoantigens in Melanoma Patients," J. Invest. Dermatol. 111:662-7 (1998) | | |
| | 217 | 11.0 - 01.1 1.1 10 | | |
| | 218 | Hulskotte at al. (1998) "Towards an HIV-1 vaccine: lessons from studies in macaque models." Vaccine 16:904-915 | | |
| | 219 | Hurtado et al. (1996) "Identification of Domains in Canine Parvovirus VP2 Essential for the Accembly of Virus-Like Particles." J. Virol 70:5422-5429 | | |
| | 220 | lacono-Connors et al., Virus Res. 43:125-136 (1996) | | |
| | 221 | Irvine, K.R. et al., "Cytokine Enhancement of DNA Immunization Leads to Effective Treatment of Established Pulmonary Metastases," Journal of Immunology, 156:238-245 (1996) | | |
| | 222 | Jia et al. (1995) "A Novel virant of avain infectious bronchitis virus resulting from recombination among three different strains." <i>Arch Virol</i> 140:259-271 | | |
| | 223 | Jiang et al. (1999) "Heterotypic protection from rotavirus infection in mice vaccinated with virus-like particles." Vaccine 17:1005-1013 | | |
| | 224 | Jiang et al., "Subtraction hybridization identified a novel melanoma differentiation associated gene, mda-7, modulated during human melanoma differentiation, growth and progression," Oncogene 11:2477 (1995) | | |
| | 225 | | | |
| | 226 | Jin et al. (1998) "Recombinant Human Respiratory Synctial Virus (RSV) from cDNA and Construction of Subgroup A and B Chimeric RSV." Virology 251:206-214 | | |
| | | | | |
| Examin | ner | Date | | |
| Signatu | ıre | Considered | | |



| Substitute for form 1449A-B/PTO | C | omplete if Known |
|-----------------------------------|------------------------|-------------------|
| | Application Number | 09/247,886 |
| INFORMATION DISCLOSURE | Filing Date | February 10, 1999 |
| STATEMENT BY APPLICANT | First Named Inventor | Juha Punnonen |
| | Group Art Unit | 1633 |
| | Examiner Name | S. Chen |
| (use as many sheets as necessary) | Attorney Docket Number | 02-030210US |
| | Date Submitted | March 25, 2002 |

| 227 | Johnston, et al. (1997) "Genetic to genomic vaccination" Vol. 15, no. 8 pp 808-809 |
|------|---|
| 228 | Kang et al. (1999) "Development of HIV/AIDS Vaccine Using Chimeric gag-env Virus-like Particles." Biol. Chem 380:353-364 |
| 229 | Karandikar et al., "CTLA-4: A Negative Regulator of Autoimmune Disease," J. Exp. Med. 184:783 (1996). |
| 230 | Keck. Et al. (1988) "In Vivo RNA-RNA Recombination of Coronavirus in Mouse Brain." J. Virol. 62:1810-1813 |
| .231 | Keenan et al.,"Lack of Protection following immunisation with H. pylori outer membrane vesicles highlights antigenic differences between H. felis and H. pylori," FEMS Microbiol Lett. 161:21-7 (1998) |
| 232 | Khavari, (1997) " Therapeutic gene delivery to the skin" Molecular Medicine Today, Dec. 1997: 533538 |
| 233 | Kim et al., "In Vivo Engineering of a Cellular Immune Response by Coadministration of IL-12 Expression Vector with a DNA Immunogen," J. Immunol. 158:816 (1997) |
| 234 | Kim, et al. (1997) "Development of a multicomponent candidate vaccine for HIV-1" Vaccine, Vol. 15 No. 8 pp 879-883. |
| 235 | Kinney et al. (1997) "Construction of Infectious cDNA Clones for Dengue 2 Virus: Strain 16681 and Its Attenuated Vaccine Derivative, Strain PDK-53." Virology 230:300-308 |
| 236 | Kinney et al., "Recombinant Vaccinia Virus/Benezuelan Equine Encephalitis (VEE) Virus Protects Mice from Peripheral VEE Virus Challenge," J. Virol. 62:4697 (1998) |
| 237 | Kleanthous et al., "Vaccine development against infection with Helicobacter pylori," Br. Med. Bull. 54:229-41 (1998) |
| 238 | Klinman et al., "CpG motifs present in bacterial DNA rapidly induce lymphocytes to secrete interleukin 6, interleukin 12 and interferon []," Proc. Nat'l. Acad. Sci. USA 93:2879 (1996) |
| 239 | Klinman, D.M. et al., "Contribution of CpG Motifs to the Immunogenicity of DNA Vaccines," Journal of Immunology, 158:3635-3639 (1997) |
| 240 | Kobayashi et al.,"Identification and Purification of Natural Killer Cell Stimulatory Factor (NKSF), A Cytokine with Multiple Biologic Effects an Human Lymphocytes," J. Exp. Med. 170:827 (1989) |
| 241 | Kobyashi, Yuzuru et al., "Antigenic Analysis of Japanese Encephalitis Virus by Using Monoclonal Antibodies," Infect. Immun. 44:117 (1984) |
| 242 | Kochel, Tadeusz et al., "Inoculation of plasmids expressing the dengue-2 envelope gene elicit neutralizing antibodies in mice," Vaccine 15:547-552 (1997) |
| 243 | Kodama et al., "Type I macrophage scavenger receptor contains -helical and collagen-like coiled coils," Nature 343:531-535 (1990) |
| 244 | Konishi et al.,"A Highly Attentuated Host Range-Restricted Vaccinia Virus Strain, NYVAC, Encoding the prM, E and NS1 Genes of Japanese Encephalitis Virus Prevents JEV Viremia in Swine," Virology 190:454 (1992) |
| 245 | Koopman et al., "Generation, intracellular transport and loading of peptides associated with MHC class 1 molecules," Curr. Opin. Immunol. 9:80-88 (1997) |
| 246 | Kramer and Fritz, "Oligonucleotide-Directed Construction of Mutations via Gapped Duplex DNA," Methods in Enzymol. 154:350-367 (1987) |
| 247 | Kramer et al. "Improved Enzymatic in vitro reactions in the gapped duplex DNA approach to oligonucleotide-directed construction of mutations," Nucl. Acids Res. 16:7207 (1988) |

| | 1 | · |
|-----------|--------------------|----|
| Examiner | Date | |
| Signature | Considered The | a. |



Substitute for form 1449A-B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

| C | omplete if Known | |
|------------------------|-------------------|--|
| Application Number | 09/247,886 | |
| Filing Date | February 10, 1999 | |
| First Named Inventor | Juha Punnonen | |
| Group Art Unit | 1633 | |
| Examiner Name | S. Chen | |
| Attorney Docket Number | 02-030210US | |
| Date Submitted | March 25, 2002 | |

| 248 | Directed DNA Mismatch-Repair System of E. coli," Cell 38:879-887 (1984) | | |
|--|--|----------------------------|--|
| 249 | Kramer et al., "The gapped duplex DNA approach to oligonucleotide-directed m Nucl. Acids Res. 12:9441-9456 (1984) | 1 | |
| 250 | Krieg et al., "CpG motifs in bacterial DNA trigger direct B-cell activation," Nature | 374:546 (1995) | |
| 251 | Krieger, M. et al., "Molecular Flypaper, Atherosclerosis, and Host Defense: Structure and Function of the Macrophage Scavenger Receptor," Cold Spring Harbor Symposia on Quantitative Biology 57:605-609 (1992) | | |
| 252 | | | |
| 253 | Kuchroo et al., "B7-1 and B7-2 Costimulatory Molecules Activate Differentially the Developmental Pathways: Application to Autoimmune Disease Therapy," Cell 80 | ne Th1/Th2 | |
| 254 | | Selection," Methods in | |
| 255 | | Molecular Biology 2: | |
| 256 | Kunkel, "Rapid and Efficient Site-Specific Mutagenesis without Phenotypic Selection Sci. USA 82:488-492 (1985) | ction," Proc. Nat'l. Acad. | |
| 257 | | d challenged via the | |
| 258 | 1 | of dengue type 4 | |
| 259 | • | pinants Confer | |
| 260 | | | |
| 261 | | | |
| 262 Laud et al., Human Immunol. 50:91-102 (1996) | | | |
| 263 | Leary et al.,"Active Immunization with Recombinent V Antigen from Yersinia Pes against Plague," Infect. Immun. 3:2854 (1995) | tis Protects Mice | |
| 264 | | xsakievirus B3(CVB3m) | |
| 265 | Lee et al., "Optimal Induction of Hepatitis C Virus Envelope-Specific Immunity by Bicistronic Plasmid DNA Inoculation with the Granulocyte-Macrophage Colony-Stimulating Facter Gene," J. Virol 72:8430-6 (1998) | | |
| 266 Lehrer et al. (1998) "Immunotherapy with Mycobacterium vaccae in the treatment of psoriasi Immunol. Med. Mircobiol. 21:71-77 | | nt of psoriasis." FEMS | |
| 267 Leung et al. (1989) Technique 1(1):11-15 | | | |
| 268 | Li et al. (1997) "Expression of the Human Papillomavirus Type 11 L1 Capsid Pro" J. Virol 71(4):2988-2995 | tein in Escherichia coli. | |
| | 1 1 | | |
| Examiner | Date | | |
| Signature Considered | | | |

Complete if Known

| DESCRIPTION TO A STATE OF THE S | | 101 101111 1 1 107 (D/) 1 O | Complete II Known | | | |
|--|--|--|---|-------------------|---------------------------------|--|
| | | Application Number | | 17,886 | | |
| | | MATION DISCLOSURE | Filing Date | Febr | uary 10, 1999 | |
| _ | STATEMENT BY APPLICANT (use as many sheets as necessary) Li et al., "Cloning and functional characteristics of processing," Proc. Natl. Acad. Sci. Liao et al. (1990) Gene 107-111 | | First Named Invent | | Punnonen | |
| YC, | | | Group Art Unit | 1633 | | |
| a | الع الع | | Examiner Name | S. CI | nen | |
| N. C. | use (use | as many sheets as necessary) | Attorney Docket Nu | mber 02-03 | 30210US | |
| , | × | | Date Submitted | | h 25, 2002 | |
| | N. S. | | | | | |
| TRA | 269 | Li et al.,"Cloning and functional c | haracterization of a sub | unit of the trans | sporter associated with antigen | |
| NT & SI | | processing," Proc. Natl. Acad. Sc | i USA 94: 8708-8713 (1 | 997). | | |
| | 270 | Liao et al. (1990) Gene 107-111 | | | | |
| | 271 | Liao et al., STRL22 is a Recepto | r for the CC Chemokine | MIP-3c " Bioc | hem, and Riophys, Comms, 226 | |
| | 271 | Liao et al., STRL22 is a Receptor for the CC Chemokine MIP-3α," Biochem. and Biophys. Comms. 236 _g , 212-217 (1997).r | | | | |
| | 272 | Liblau et al. "Th1 and Th2 CD4+ | cells in the pathogenes | is of organ-spe | cific autoimmune diseases." | |
| | | Immunol. Today 16:34-38 (1995) | | | | |
| 1 | 273 | Liem et al. (1994) Nucleic Acids I | Res 22(9):1613-1619 | | | |
| | 274 | Lieschke et al.,"Bioactive murine | and human interleukin- | 12 fusion prote | ins which retain antitumor | |
| | 2/4 | activity in vivo," Nature Biotech. 1 | 5:35 (1997) | | ľ | |
| | 275 | Limbach and Paoletti (1996) "No | on-replicating expression | n vectors: appli | cations in vaccine development | |
| | | and gene therapy." Epidemol. Infe | ect. 116:241-256 | | | |
| | 276 | Lowe et al. (1997) "Human Papill | amavirus Typw 2 (HPV- | 11) Nutralizing | Antibobies in the Serum and | |
| | | Genitial Mucosal Secretions of Afr Expressed in Yeast." J. Invect Dis | ican Green Monkeys Im | munized with | HPV-11 Virus-like particles | |
| | 077 | Lowman, Henry B, and Jame A | Wells "Affinity Maturati | ion of Human (| Frough Harmona by Managalant | |
| | 277 | Lowman, Henry B. and Jame A. Wells, "Affinity Maturation of Human Growth Hormone by Monovalent Phage Display," J. Mol. biol. 234:564-578 (1993) | | | | |
| | 278 | Lowman, Henry B. and James A. Wells, "Monovalent Phage Display: A Method for Selecting Variant | | | | |
| | | Proteins from Random Libraries," | Methods: A Companion | to Methods Er | nz. 3(3):205-216 (1991) | |
| | 279 | Lu, Zhijian et al., "Expression of | Thioredoxin Random Pe | ptide Libraries | on the Escherichia coli Cell | |
| | | Surface as Functional Fusions to Flagellin: A System Designed for Exploring Protein-Protein | | | | |
| | 000 | Interactions," Bio/Technology 13:366-372 (1995) Luytjes et al. (1989) "Amplification, Expressionand Packaging of a Foreign Gene by Influenza Virus." | | | | |
| | 280 | <i>Cell</i> 59:1107-1113 | | | | |
| | 281 | Mandl et al. (1997) "Infectious cD | NA clones of tick-borne | encephalitis vi | rus European subtype protopic | |
| ļ | | Mandl et al. (1997) "Infectious cDNA clones of tick-borne encephalitis virus European subtype protopic strain Neudoerfl and high virulence strain Hypr." <i>J. Gen. Virol</i> 78:1049-1057 | | | | |
| | 282 | Marchetti, Marta et al., "Protectio | n against Helicobactel p | ylori infection | in mice by intragastric | |
| | | vaccination with H. pylon antigens | is achieved using a non-toxic mutant of E. coli heat-labile enterotoxin | | | |
| | | (LT) as adjuvant," Vaccine 16:33-7 (1998) | | | | |
| | 283 | Marusina et al.,"Allelic Variation in the Mouse Tap-1 and Tap-2 Transporter Genes," J. Immunol. 158:5251-5256 (1997) | | | | |
| | 284 | Mattheakis, Larry C. et al., "An in vitro polysome display system for identifying ligands from very large | | | | |
| <u></u> | 1207 | peptide libraries," Proc. Nat'l. Acad. Sci. USA 91(19):9022-6 (1994) | | | | |
| | 285 | McAtee, C. Patrick et al., "Identifi | cation of Potential Diagr | nostic and Vac | cine Candidates of Helicobacter | |
| | | pylori by "Proteome" Technologies | pylori by "Proteome" Technologies," Helicobacter 3:163-9 (1998) | | | |
| | 286 | McAtee, C. Patrick et al., "Identification of Potential Diagnostic and Vaccine Candidates of Helicobacter | | | | |
| | 1. | pylori by Two-Dimensional Gel Electrophoresis, Sequence Analysis, and Serum Profiling," Clin. Diagn. Lab. Immunol. 5:537-42 (1998) | | | | |
| | 287 | McCutcheon et al. "A senstive ELISPOT assay to detect low-frequency human T lymphocytes,", J. | | | | |
| | 201 | Immunol. Methods 210:149-66 (19 |) 9 7) | - | | |
| 288 McGregor, Du | | McGregor, Duncan, "Selection of | Proteins and Peptides | rom Libraries I | Displayed on Filamentous | |
| | 1-00 | | | | | |
| | | | | | 9 | |
| Exar | miner | | | Date | | |
| Sia- | atura | | | | | |
| Sign | ature | | | Considered | | |
| | | | | | | |

Substitute for form 1449A-B/PTO

| Substitute for form 1449A-B/PTO | C | omplete if Known |
|----------------------------------|------------------------|-------------------|
| | Application Number | 09/247,886 |
| INFORMATION DISCLOSURE | Filing Date | February 10, 1999 |
| STATEMENT BY APPLICANT | First Named Inventor | Juha Punnonen |
| STATEMENT BY APPLICANT | Group Art Unit | 1633 |
| use as many sheets as necessary) | Examiner Name | S. Chen |
| yse as many sheets as necessary) | Attorney Docket Number | 02-030210US |
| | Date Submitted | March 25, 2002 |

| AT & TR | 289 | Bacteriophage," Mol Biotechnol. 6(2):155-62 (1996) | T |
|----------|----------------|---|----------|
| | 289 | Melen et al., "Enzymatic Characterization of Interferon-Induced Antiviral GTPases Murine Mx1 and | |
| L | | Human MxA Proteins," J. Biol, Chem. 269: 2009-2015 (1994). | 1 |
| 1 | 290 | Metz et al. (1996) "Bicistronic and Two-Gene Retroviral Vectors for Using MDR1 as a Selectable Market | |
| <u> </u> | | and a Therapeutic Gene." Virology 217:230-241 | ł |
| | 291 | Meulenberg et al. (1998) "An Infectious cDNA Clone Porcine Reproductive and Respiratory Syndrome | |
| <u> </u> | | Virus." Coronaviruses and Arteriviruses 440:199-206 | |
| 1 | 292 | Meulenberg et al. (1998) "Infectious Transcrips from Cioned Genome-Length cDNA of Porcine | |
| - | | Reproductive and Respiratory Syndrome Virus." J. Virol. 72:380-387 | ļ |
| | 293 | Meyer et al. (1998) "Bovine herpesvirus type 1 glycoprotein H is essential for penetration and and | |
| | | propagation in cell culture." J. Gen Virol. 79:1983-1987 | ļ |
| | 294 | Mittelholzer et al. (1997) "Generation of cytopathogenic RNA of classical swine fevor in persistently infected persists call lines." Virus Res 54:105-107 | 1 1 |
| - | | infected porcine cell lines." Virus Res 51:125-137 | |
| i | 295 | Monaco, "Pathways for the processing and presentation of antigens to T cells," J. Leukocyte Biol. 57:543-57 (1995) | |
| - | | Morita et al. (1987) "Recombinant vaccinia virus LC16m0 or LC1m8 that expresses hepatitus B surface | |
| | 296 | antigen while preserving the attention of the parental virus." <i>Vaccine</i> 5:65-70 | |
| - | 007 | Mosmann and Coffman, Adv. Immunol. 46:111 (1989) | |
| | 297 | | |
| | 298 | Moss (1994) "Replicating and Host-Restricted Non-Replicating Vaccina Virus Vectors for Vaccine | |
| | | Development." Dev. Biol. Stand 82:55-63 | ' |
| | 299 | Mundt and Vakharia (1996) "Synthetic transcripts of double-stranded Birnavirus genome are | |
| | | infectious." Proc Nat'l Acad. Sci USA 93:11131-11136 | |
| | 300 | N. Miller et al., (1995) "Targeted vectors for gene therapy," FASEB J., 9, pp. 190-199. | |
| | 301 | Nakamaye and Eckstein, "Inhibition of restriction endonuclease Nci I cleavage by phosphorothioate | |
| | 301 | groups and its application to oligonucleotide-directed mutagenesis," Nucl. Acids Res. 14:9679-9698 | |
| | | (1986) | |
| | 302 | Nambiar et al.,"Total Synthesis and Cloning of a Gene Coding for the Ribonuclease S Protein," Science | |
| | _ | 223:1299-1301 (1984) | |
| | 303 | Nazerian et al. (1996) "Protection and synerhism by Recombinant Fowl Pox Vaccines Expressing | |
| <u> </u> | | Genes from Marek's Disease Virus." Avian Dis. 40:368-376 | |
| 1 | 304 | Nemoto, Naoto et al., "In vitro virus: Bonding of mRNA bearing puromycin at the 3'-terminal end to the | |
| | | C-terminal end of its encoded protein on the ribosome in vitro," FEBS Lett. 414(2):405-8 (1997) | |
| | 305 | Ness, J. et al., (1999) "DNA shuffling of subgenominc sequences of subtilisin." Nature Biotechnology | |
| ļ | | 17:893-896. | |
| 1 | 306 | Neurath, A.R. et al., "Monoclonal Antibodies to Hepatitis BSurface Antigen (HBsAg) with Anti-a | |
| | | Specificity Recognize A Synthetic Peptide Analogue (S135-155) with Unmodified Lysine (141)," J. Virol. Methods 9:341-346 (1984) | |
| | - | Ni and Barrett "Nucleotide and deduced amine said services of the standard to | |
| | 307 | Ni and Barrett, "Nucleotide and deduced amino acid sequence of the structural protein genes of | |
| | | Japanese encephalitis viruses from different geographical locations,"J. Gen. Virol. 76:401 (1995) | \sqcup |
| | 308 | Notka et al. (1999) "Constructon and Characterization of Recombinant VLPs and Semliki-Forest Virus Live Vectors for Comparative Evaluation in the SHIV Monkey Model." <i>Biol Chem</i> 380:341-352 | |
| | | Live vectors for Comparative Evaluation in the Shiv Workey World Note 1 Biol Chem 380:341-352 | |

| | · · · · · · · · · · · · · · · · · · · | |
|-----------|---------------------------------------|--|
| Examiner | Date | |
| Signature | Considered | |

| Substitute for form 1449A-B/PTO | C | omplete if Known |
|--|------------------------|-------------------|
| | Application Number | 09/247,886 |
| INFORMATION DISCLOSURE | Filing Date | February 10, 1999 |
| STATEMENT BY APPLICANT Use as many sheets as necessary) | First Named Inventor | Juha Punnonen |
| C78 | Group Art Unit | 1633 |
| \$ <u>\$</u> | Examiner Name | S. Chen |
| | Attorney Docket Number | 02-030210US |
| 翼 | Date Submitted | March 25, 2002 |

| - 3 | <u> </u> | |
|------------|----------|---|
| IT & TRANS | 309 | O'Neil, Karyn T. et al., "Phage display: protein engineering by directed evolution," Curr. Opin. Struct. Biol. 5(4):443-9 (1995) |
| | 310 | Oda Kobe J. Med. Sci. 22:123 (1976) |
| | 311 | Orme (1997) "Progress in the development of new vaccines against tuberculosis." Int. J. Tuberc. Jung. Dis 1:95-100 |
| | 312 | Ortmann et al.,"A Critical Role for Tapasin in the Assembly and Function of Multimeric MHC Class 1- TAP Complexes," Science 277: 1306-1309 (1997). |
| | 313 | Paoletti et al. (1995) "Highly Attenuated Poxvirus: HYVAC, ALVAC and TROVAC," Dev Biol Stand 84:159-163 |
| | 314 | Park and RajBhandary (1998) "Tatracycline-Regulated Suppression of Amber Codons in Mammalian Cells." Mol Cell Biol 18:4418-4425 |
| | 315 | Parren, Paul W.H.I. et al., "Relevance of the antibody response against human immunodeficiency virus type 1 envelope to vaccine design," Immunol. Lett. 57:105-112 (1997) |
| | 316 | Parronchi et al., "IL-4 and IFN (□ and □) Exert Opposite Regulatory Effects on the Development of Cytolytic Potential by Th1 or Th2 Human T Cell Clones," J. Immunol. 149:2977 (1992) |
| | 317 | Paul and Seder, "Lymphocyte Responses and Cytokines," Cell 76:241 (1994) |
| | 318 | Paulusma et al. (1996) "Congenital jaundice in rats with a mutation in a multidrug resistance-associated protein gene." Science 271:1126-1128 |
| | 319 | Pelletier, Joelle N., (2001) "A Rachitt for our toolbox" Nature Biotechnology vol. 19, p. 314-315 |
| | 320 | Peng et al. (1998) "Papillomavirus Virus-like Particles Can Deliver Defined CTL Epitopes to the MHC Class 1 Pathway." Virology 240:147-157 |
| | 321 | Penzes et al. (1996) "Replication and Packaging of Coronavirus Infectious Bronchitis Defective RNSa Lacking a Long Open Reading Frame." <i>J. Virol</i> 70:86660-8668 |
| | 322 | Phizicky, Eric M. et al., "Protein-Protein Interactions: Methods for Detection and Analysis," Microbiol Rev. 59(1):94-123 (1995) |
| | 323 | Pletnev, A.G. et al., Chimeric Tick-Borne Encephalitts and Dengue Type 4 Viruses: Effects of Mutations on Neurovirulence in Mice," J. Virol. 67(8):4956-4963 (1993) |
| | 324 | Polo et al. (1999) "Stable alphavirus packaging cell lines for Sidbis virus-and Semlike Forest virus-derived vectors." Proc Nat'l Acad. Sci USA> 96:4598-4603 |
| | 325 | Porcelli (1995) Adv. Immunol 59:1 |
| | 326 | Powis et al.,"Polymorphism in a second ABC transporter gene located within the class il region of the human major hisotcompatibility complex,"Proc. Nat'l. Acad. Sci. USA 89:1463-1467 (1996) |
| | 327 | Premack et al. (1996) Nature Med. 2:1174 |
| | 328 | Pryor et al. (1998) "Growth restriction of dengue virus type 2 by site-specific mutagenesis of virus-encoded glycoproteins." <i>J. Gen Virol.</i> 79:2631-2639 |
| | 329 | Punnonen et al. J. Exp Med. 185:993-1004 |
| | 330 | Punnonen et al., "Interleukin 13 induces interleukin 4-independent IgG4 and IgE synthesis and CD23 expression by human B cells," Proc. Nat'l. Acad. Sci. USA 90:3730 (1993) |

| | Į (| 4 |
|-----------|------------|---|
| Examiner | Date | |
| Signature | Considered | |

| Substitute for form 1449A-B/PTO | C | omplete if Known | |
|--------------------------------------|------------------------|-------------------|--|
| | Application Number | 09/247,886 | |
| INFORMATION DISCLOSURE | Filing Date | February 10, 1999 | |
| TATEMENT BY APPLICANT | First Named Inventor | Juha Punnonen | |
| 6/8 | Group Art Unit | 1633 | |
| The file | Examiner Name | S. Chen | |
| (5) The as many sheets as necessary) | Attorney Docket Number | 02-030210US | |
| <u> </u> | Date Submitted | March 25, 2002 | |

| - SER | |
|-----------|---|
| &TRAN 331 | Puri et al. (1998) "Complete Nucleotide Sequences Analysis of a Western Pacific Dengue-1 Virus Strain." Virus Genes 17:85-88 |
| 332 | Racke, Michael K. et al., "Cytokine-induced Immune Deviation as a Therapy for Inflammatory Autoimmune Disease," J. Exp. Med. 180:1961-66 (1994) |
| 333 | Rahden-staron et al. (1991) Biochem & Biophy Res. & Commun. 177(2):597-602 |
| 334 | Raj and Jones (1997) "Growth of infectious bronchitis virus vaccines in oviducts derived from oestrogen-treated chicks and embryos." <i>Vaccine</i> 15:163-168 |
| 335 | Reiser et al., "Cloning and expression of a cDNA for the T-cell-activating protein TAP," Proc. Nat'l. Acad. Sci. USA 85:2255-2259 (1988) |
| 336 | Roden et al. (1996) "In Vitro Generation and TypeSpecific Neutralization of a Human Papillomavirus Type 16 Viron Pseudotype." <i>J. Virol.</i> 70:5875-5883 |
| 337 | Roggenkamp et al., "Passive Immunity to Infection with Yersinia spp. Mediated by Anti-Recombinant V Antigen is Dependent on Polymorphism of V Antigen," Infect. Immun. 65:446 (1997) |
| 338 | Roncarolo et al. "Human T- and B-cell functions in SCID-hu mice," Semin. Immunol. 8: 207 (1996) |
| 339 | Sagazio et al. (1998) "Antigenic characterization of canine parvovirus strains isolated in Italy." J. Virol. Methods 73:197-200 |
| 340 | Saggio et al. (1995) "CNFT Variants with increased biological potency and receptor selectivity define a functional site of receptor interaction." <i>EMBO Journal</i> 14(13):3045-3054 |
| 341 | Sakmar and Khorana, "Total synthesis and expression of a gene for the a-subunit of bovine rod outer segment guanine nucleotide-binding protein (transducin), Nucl. Acids Res. 14:6361-6372 (1988) |
| 342 | Sanz et al. (1994) "Genetic heterogeneity of the attachment glycoprotein G among A respiratory syncytial virusus." Virus Res 33:203-217 |
| 343 | Saurmann et al. (1990) "Molecular Cloning and Characterization of a German HIV-1 Isolate." AIDS Res. Hum Retroviruses 6:813-823 |
| 345 | Sayers et al. "Strand specific cleavage of phosphorothioate-containing DNA by reaction with restriction endonucleases in the presence of ethidium bromide,", Nucl. Acids Res. 16:803-814 (1988) |
| 346 | Sayers et al., "5'-3' Exonucleases in phosphorothioate-based oligonucleotide-directed mutagenesis," Nucl. Acids Res. 16:791-802 (1988) |
| 347 | Schatz, Peter J. et al., "[10] Screening of Peptide Libraries Linked to lac Repressor," Methods Enzymol. 267:171-91 (1996) |
| 348 | Schmaljohn, A.L. et al., "Non-neutralizing monoclonal antibodies can prevent lethal alphavirus encephalitis," Nature 297:70 (1982) |
| 349 | Schwarz et al. (1957) "Modification of Infevtious Bovine Rhinotrachetis (IBR) Virus in Tissue Culture and Development of a Vaccine." Proc Soc Exp. Biol Med. 96:453-458 |
| 350 | Schwarz et al. (1958) "Propagation and Modification of Infactious Bovine Rhinotrachetis (BR) Virus in Porcine Kidney Tissue Culture." <i>Proc Soc. Exp. Biol. Med</i> 97:680-683 |
| 351 | Scott, Jamie K. and George P. Smith, "Searching for Peptide Ligands with an Epitope Library," Science 249:386-388 (1990) |
| 352 | Seliger et al., "TAP off – tumors on," Immunol. Today 18: 292-299 (1997). |

| | [| |
|-----------|------------|--|
| Examiner | Date | |
| Signature | Considered | |

| Substitute for form 1449A-B/PTO | С | omplete if Known | | |
|-----------------------------------|------------------------|-------------------|-------------|---|
| | Application Number | 09/247,886 | | |
| INFORMATION DISCLOSURE | Filing Date | February 10, 1999 | - | |
| STATEMENT BY APPLICANT | First Named Inventor | r Juha Punnonen | | |
| Ve. | Group Art Unit | 1633 | | |
| use as many sheets as necessary) | Examiner Name | S. Chen | | |
| vuse as many sheets as necessary) | Attorney Docket Number | 02-030210US | • | - |
| AR S | Date Submitted | March 25, 2002 | | |

| V | Bate Capitated Indicat 25, 2002 |
|----------------|--|
| | |
| TENT & TR. 353 | Sharma and Graham (1982) "Influence of Material Antibody on Efficacy of Embryo Vaccination with Cell-Associated ans Cell-Free Marek's Disease Vaccine." Avian Dis. 26:860-870 |
| 354 | Sheu et al. (1995) "Deletion or alteration of hydrophobic amino acids at the third transmembrane domains of Hepatitis B Surface antigen enhances its production in Escherichia coli." 160(2):179-184 |
| 355 | Shouval et al. (1994) "Improved immunogenicity in Mice of a mammalian cell-derived recombinant hepatitis B Vaccine containing pre-S1 and pre-S2 antigens as compared with conventional yeast-derived vaccines." Vaccine 12(15):1453-1459 |
| 356 | Smith, "In Vitro Mutagenesis," Ann. Rev. Genet. 19:423-462 (1985) |
| 357 | Sokolic et al. (1996) "A Bicistronic Retrovirus Vector Containing a Picornavirus InternationalRibosome Entry Site Allows for Correct of X-Linked CGD Selection for MDR1 Expression." Blood 87:42-50 |
| 358 | Soong et al. (1998) "DNA shuffling as a tool to evolve desired retrovial phenotypes." Abstracts of papers presented at the 1998 meeting on Gene Therapy, p. 228 Cold Spring Harbor Laboratory, Cold Spring Harbor, New York, September 23-27, 1998 |
| 359 | Soong et al. (1998) "Directed evolution of novel retroviral tropisms by DNA shuffling." Abstract #97, Programs & Abstracts, 1st Annual Meeting of the American Society of Gene Therapy, Seattle, Washington, May 28-31, 1998 |
| 360 | Soong et al. (1998) "Directed evolution of novel retroviral tropisms by DNA shuffling." Abstracts of papers presented at the 1998 meeting on Retroviruses, Cold Springs Harbor Laboratory, Cold Spring Harbor, New York, May 26-31, 1998 |
| 361 | Sosnovtsev et al. (1998) "Cleavage of the Feline Calicivirus Capsid Precurrsor Is Mediated by a Virus- Encoded Proteinase." J. Virol 72:3051-3059 |
| 362 | Srinivasan et al. (1987) "Molecular characterization of human immunodeiciency virus from Zaire." Gene 52:71-82 |
| 363 | Stemmer (1991) "A 20-Minute ethidium bromide/high-salt extraction protocol for plasmid DNA." BioTechniques 10(6): 726 |
| 364 | Stemmer (1994) Nature 370:389 |
| 365 | Stemmer et al. (1991) "Expression of antibody Fv Fragments specific for a heavy metal chelate (indium-EDTA) in E. coli." Journal of Cellular Biotechnology Supplement 0 (15 PART G):217 |
| 366 | Stemmer et al. (1992) "Enzymatic inverse PCR: a restriction site independent, single-fragment method for high-efficiency, site-directed mutagenesis." <i>BioTechniques</i> 13(2): 214, 216, 218-220 |
| 367 | Stemmer et al. (1993) "Increased antibody expression from Escherichia coli through wobble-base library mutagenesis by enzymatic inverse PCR>" Gene 123(1): 1-7 |
| 368 | Stemmer et al. (1993) "Selection of an active single chain Fv antibody from a protein linker library prepared by enzymatic inverse PCR>" Biotechniques 14(2): 256-265 |
| 369 | Stern et al., "Purification to homogeneity and partial characterization of cytotoxic lymphocyte maturation factor from human B-lymphoblastoid cells," Proc. Nat'l. Acad. Sci. USA 87:6808 (1990) |
| 370 | Stohwasser et al., "Molecular cloning of the mouse proteasome subunits MC14 and MECL-1: reciprocally regulated tissue expression of interferon -γ-modulated proteasome subunits," Eur. J. Immunol. 27:1182-1187 (1997) |
| 371 | Subbarao et al. (1993) Rescue of an Influenza A Virus Wild-type PB2 Gene and a Mutant Derivative Bearing a Site-Specific Temperature-sensitive and Attenuating Mutation." J. Virol. 67:7223-7228 |

| - | | , |
|-----------|------------|---|
| Examiner | Date | |
| Signature | Considered | |

| Substitute for form 1449A-B/PTO | Complete if Known | | |
|--------------------------------------|------------------------|-------------------|--|
| | Application Number | 09/247,886 | |
| INFORMATION DISCLOSURE | Filing Date | February 10, 1999 | |
| STATEMENT BY APPLICANT | First Named Inventor | Juha Punnonen | |
| | Group Art Unit | 1633 | |
| (Course as many sheets as necessary) | Examiner Name | S. Chen | |
| | Attorney Docket Number | 02-030210US | |
| 加 | Date Submitted | March 25, 2002 | |

| | Date Submitted warch 25, 2002 | | |
|--|--|--|--|
| 23 (8) | | | |
| 7 a man 373 | Sugimoto et al. (1994) "Characteristics of an attenuated vaccinia virus strain, LC16m0 and It's recombinant virus vaccines." Vaccine 12:675-681 | | |
| 373 | Sugimoto et al. (1995) Retroviral Coexpression of a Multidrug Resistance Gene (MDR1) and Human a-Galactosidase A for Gene Therapy of Febry Disease." Human Gene Ther 6:905-915 | | |
| 374 | Tahara et al., "IL-12 Gene Therapy Using Direct Injection of Tumors with Genetically Engineered Autologous Fibroblasts," Human Gene Therapy 6:1607 (1995) | | |
| 375 | Tan et al., "Characterizationof Recombinant Extracellular Domain of Human Interleukin-10 Receptor," J. Biol. Chem. 270:12906 (1995) | | |
| 376 Tang et al., "Vaccination onto bare skin," Nature 388: 729-730 (1997). | | | |
| 377 | Tano et al. (1990) Proc. Nat'l Acad Sci USA 87:686-690 | | |
| 378 | Tartagila et al. (1992) "NYVAC: A Highly Attenuated Strain of Vaccinia Virus." Virology 188:217-232 | | |
| 379 | Tascon, Richard E. et al., "Vaccination against tuberculosis by DNA injection," Nat. Med. 2:888-92 (1996) | | |
| 380 | Taylor et al. , "The rapid generation of oligonucleotide-directed mutations at high frequency using phosphorothioate-modified DNA," Nucl. Acids Res. 13:8765-8787 (1985) | | |
| Taylor et al., "The use of phosphorothioate-modified DNA in restriction enzyme reactions to prenicked DNA," Nucl. Acids Res. 13:8749-8764 (1985) | | | |
| Thierfelder et al. "Requirement for Stat4 in interleukin-1-2-mediated responses of natural killer ar cells", Nature 382:171 (1996) | | | |
| 383 | Todd (1974) "Development of Intranasal Vaccination for the Immunization of Cattle Against infectious Bovine Rhinotrachetis." <i>Can. Vet J.</i> 15:257-259 | | |
| 384 | Trudel et al., "pGATA: A Positive Selection Vector Based on the Toxicity of the Transcription Factor GATA-1 to Bacteria," Biotechniques 20:684-693 (1996). | | |
| 385 | Tytgat, G.N.,"Review article: practical management issues for the Helicobacter pylori-infected patient at risk of gastric cancer,"Aliment. Pharmacol. Ther. 12(1):123-8 (1998) | | |
| 386 | Valle amd Falgout (1998) "Mutagenesis of the NS3 Protease of Dengue Virus Type 2." J. Virol 72:624-632 | | |
| 387 | van Dinten et al. (1997) "An Infectious arterivirus cDNA clone." Proc. Nat'l Acad. Sci USA94:991-996 | | |
| 388 | VanCott et al., "Antibodies with Specificity to Native gp120 and Neutralization Activity against Primary Human Immunodeficiency Virus Type 1 Isolates Elicited by Immunization with Oligomeric gp160," J. Virol. 71:4319-4330 (1997) | | |
| 389 | Vassilev et al. (1997) "Authentic and Chimeric Full-length Genomic cDNA Clones of Bovine Viral Diarrhea Virus That Yeild Infectious Transcrips." <i>J. Virol</i> 71:471-487 | | |
| 390 | Velzing et al. (1999) "Induction of protective immunity against Dengue virus type 2." Vaccine 17:1312-1320 | | |
| 391 | Villinger et al., "Comparative Sequence Analysis of Cytokine Genes from Human and Nonhuman Primates," J. Immunol. 155:3946-3954 (1995) | | |
| 392 | Walther et al. (1996) "Cell type specific and inducible promoters for vectors in gene therapy as an approach for cell targeting." <i>J. Mol. Med.</i> 74:379-392 | | |

| | Į. | |
|-----------|------------|---|
| Examiner | Date | } |
| Signature | Considered | |

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

| Substitute for form 1449A-B/PTO | | or form 1440A P/PTO | | | |
|---------------------------------|------------------------------------|---|--|--|--------------|
| Security of the teachers | | DI 10MI 1449A-B/PTO | | omplete if Known | |
| IN | IEODM | ATION DISCLOSUDE | Application Number | 09/247,886 | |
| 1 | INFORMATION DISCLOSURE | | Filing Date | February 10, 1999 | |
| EZ | STATEMENT BY APPLICANT | | First Named Inventor | Juha Punnonen | |
| | <u>ن</u> م | | Group Art Unit | 1633 | |
| 1 | 4 60 8 | s many sheets as necessary) | Examiner Name | S. Chen | |
| 25 700 | Attorney Docket Number 02-030210US | | | | |
| <u> </u> | -¥ | | Date Submitted | March 25, 2002 | |
| | <u> </u> | T | · | | |
| T& TRAD | 393 | (1994) | - | of T Cell Activation," Immunity 1:405 | |
| | 394 | Wells et al., "Cassette mutagenes sites," Gene 34:315-323 (1985) | sis: an efficient method for gen | eration of multiple mutations at defined | |
| | 395 | Wells et al., "Importance of hydro | gen-bond formation in stabilizing | ng the transition state of subtilisin," Phils | |
| | 393 | Trans. R. Soc. Lond. A317:415-42 | 23 (1986) | ig are narrower state or subtilioni, 1 tills. | |
| | 396 | Wermeille, Joel et al., "The eradi (1998) | cation treatments of Helicobact | er pylori," Pharm. World Sci. 20:1-17 | |
| | 397 | Whelan et al. (1995) "Efficient rec | overy of infectious vesicular ste | omatitis virus entirely from cDNA | |
| | 337 | clones." Proc. Nat'l. Acad. Sci. USA 92:8388-8392 | | | |
| | 398 | Whitacre et al., "Treatment of Autoimmune Disease by Oral Tolerance to Autoantigens," Clin. Immunol. | | | |
| | | Immunopathol. 80: S31-9 (1996). | athol. 80: S31-9 (1996). | | |
| | 399 | Wiertz et al., "SEC61-mediated transfer of a membrane protein from the endoplasmic reticulum to the | | | |
| | | proteasome for destruction," Natur | e 384: 432 (1996). | Bid at 1410 01 | |
| | 400 | from the Endonlasmic Reticulum to | egalovirus USTT Gene Product o the Cytosol " Coll 84: 769-770 | Dislocates MHC Class 1 Heavy Chains | ł |
| | 404 | from the Endoplasmic Reticulum to the Cytosol," Cell 84: 769-779 (1996). Winther et al. (1998) "Viral-Induced Rhinitis." Am J. Rhinol 12:17-20 | | | |
| | 401 | | | · . | |
| | 402 | Wisniak et al. (1974) "Hydrogen S | • | | |
| | 403 | Wioch et al., "The influence of DN Vectors," Hum. Gene Ther. 9:1439 | A Sequence on the Immunostice 1447 (1998) | mulatory Properties of Plasmid DNA | |
| | 404 | Woody, Mary Alice et al., "Staphy and vaccine potential in a mouse n | rlococcal enterotoxin B mutants | (N23K and F44S): biological effects | |
| | 405 | Wright et al. (1998) "Humane end encephalomyelitis virus infection of | points are an objective measur | e of morbidity in Venezelan | |
| | 406 | Xiang, Z. et al., "Manipulation of the | ne Immune Response to a Plas | mid-Encoded Viral Antigen by | \dashv |
| | | Coinoculation with Plasmids Expre | ssing Cytokines," Immunity 2:1 | 29-135 (1995) | |
| | 407 | when directly transfected into the li | ver of a chimpanzee." Proc Na | lone of hepatitis C virus are infectious t'l Acad. Sci. USA 94:8738-8743 | |
| | 408 | mutagenesis of an infectious cDNA | A clone." <i>Proc. Nat'l Acad. Sci</i> U | of the hepatitis C virus after in vitro USA 96:2291-2295 | |
| | 409 | Yao et al. (1998) "Generation of M Leaions." <i>J. Virol.</i> 72:2647-2654 | utant Infectious Bursal Disease | e Virus That Does Not Cause Bursal | \neg |
| | 410 | | Clones of the Human Respirat | ory Syncytial (RS) Virus " J. Virol | \neg |
| · | 420 | Zamvil, Scott S. and Lawrence S | | n Experimental Allergic | |

| | · | 1 | |
|-----------|---|------------|--|
| Examiner | | Date | |
| Signature | | Considered | |

Zhong et al. (1998) "Idenification and Characterization of an RNA-Dependent RNA Polymerase Activity

Zoller and Smith, "Oligonucleotide-directed mutagenesis using M13-derived vectors: an efficient and

within the Nonstructural Protein 5B Region of Bovine Viral Diarrhea Virus," *J. Virol.* 72:9365-9369 **Zhong, Weimin et al.,** "Therapeutic passive vaccination against chronic Lyme disease in mice," Proc.

Encephalomyelitis," Ann. Rev. Immunol. 8:579-621 (1990)

Nat'l. Acad. Sci. USA 94:12533-12538 (1997)

421

422

423

| Substitute for form 1449A-B/PTO | Complete if Known | | |
|---|------------------------|-------------------|--|
| | Application Number | 09/247,886 | |
| INFORMATION DISCLOSURE | Filing Date | February 10, 1999 | |
| STATEMENT BY APPLICANT Crouse as many sheets as necessary) | First Named Inventor | Juha Punnonen | |
| C ₁₆ | Group Art Unit | 1633 | |
| ૾ ૻૄૻ૽ | Examiner Name | S. Chen | |
| | Attorney Docket Number | 02-030210US | |
| ₹ | Date Submitted | March 25, 2002 | |

| » | | |
|------|---------|--|
| ATEN | 18 THAT | general procedure for the production of point mutations in any fragment of DNA," Nucl. Acids res. 10:6487-6500 (1982) |
| | 424 | Zoller and Smith, "Oligonucleotide-Directed Mutagenesis: A Simple Method using Two Oligonucleotide Primers and a Single-Stranded DNA Template," Methods in Enzymol. 154:329-350 (1987) |
| | 425 | Methods in Enzymol. 100:468-500 (1983) |
| | 426 | 270(11):5864-5871 |
| | 427 | Zuschek et al. (1961) "Immunogenicity of 2 Infectious Bovine Rhinotracheitis Vaccines." J. Am. Vet. Med. Assoc. 139"236-237 |
| | 428 | Zygraich et al. (1974) "In Vivo and In Vitro Properties of a Temperature Sensitive Mutant of Infectious Bovine Rhinotracheitis Virus." <i>Res. Vet. Sci.</i> 16:328-335 |

| | [| |
|-----------|------------|--|
| Examiner | Date | |
| Signature | Considered | |